

# SEQUENCE LISTING

<110> Bernard Pau  
 <120> Specific antibodies for diagnosing heart failure  
 <130> P70365US0  
 <140> US 10/523,400  
 <141> 2005-02-03  
 <150> PCT/FR03/02483  
 <151> 2003-08-07  
 <150> FR 0210063  
 <151> 2002-08-07  
 <160> 124  
 <170> PatentIn version 3.1  
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 <213> Homo sapiens : proBNP(1-108)  
  
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 His Pro Leu Gly Ser Pro Gly Ser Ala Ser Asp Leu Glu Thr Ser Gly  
 1 5 10 15  
 Leu Gln Glu Gln Arg Asn His Leu Gln Gly Lys Leu Ser Glu Leu Gln  
 20 25 30  
 Val Glu Gln Thr Ser Leu Glu Pro Leu Gln Glu Ser Pro Arg Pro Thr  
 35 40 45  
 Gly Val Trp Lys Ser Arg Glu Val Ala Thr Glu Gly Ile Arg Gly His  
 50 55 60  
 Arg Lys Met Val Leu Tyr Thr Leu Arg Ala Pro Arg Ser Pro Lys Met  
 65 70 75 80  
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 85 90 95  
 Ser Ser Gly Leu Gly Cys Lys Val Leu Arg Arg His  
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 Ser Pro Lys Met Val Gln Gly Ser Gly Cys Phe Gly Arg Lys Met Asp  
 1 5 10 15

Arg Ile Ser Ser Ser Ser Gly Leu Gly Cys Lys Val Leu Arg Arg His  
 20 25 30

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<400> 3

His Pro Leu Gly Ser Pro Gly Ser Ala Ser Asp Leu Glu Thr Ser Gly  
 1 5 10 15  
 Leu Gln Glu Gln Arg Asn His Leu Gln Gly Lys Leu Ser Glu Leu Gln  
 20 25 30  
 Val Glu Gln Thr Ser Leu Glu Pro Leu Gln Glu Ser Pro Arg Pro Thr  
 35 40 45  
 Gly Val Trp Lys Ser Arg Glu Val Ala Thr Glu Gly Ile Arg Gly His  
 50 55 60  
 Arg Lys Met Val Leu Tyr Thr Leu Arg Ala Pro Arg  
 65 70 75

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<400> 4

Tyr Thr Leu Arg Ala Pro Arg Ser Pro Lys Met Val Gln Gly Ser Gly  
 1 5 10 15

<210> 5  
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<400> 5

Arg Ala Pro Arg Ser Pro  
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<400> 6

Cys Gly Arg Ala Pro Arg Ser Pro  
1 5

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<400> 7

Cys Gly Arg Ala Pro Arg Ser Pro  
1 5

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<400> 8

Cys Gly Arg Ala Pro Arg Ser Pro Lys  
1 5

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<400> 9

Cys Gly Arg Ala Pro Arg Ser Pro Lys  
1 5

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<400> 10

Cys Gly Arg Ala Pro Arg Ser Pro Lys Met Val  
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<400> 11

Cys Gly Arg Ala Pro Arg Ser Pro Lys Met Val Gln Gly Ser Gly  
1 5 10 15

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<400> 12

Arg Ala Pro Arg Ser Pro Gly Cys  
1 5

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<400> 13

Arg Ala Pro Arg Ser Pro Gly Cys  
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<400> 14

Cys Tyr Thr Leu Arg Ala Pro Arg Ser Pro Lys  
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<400> 15

Cys His Arg Lys Met Val Leu Tyr Thr Leu Arg Ala Pro Arg Ser Pro  
1 5 10 15

Lys

<210> 16

<211> 17

<212> PRT

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<400> 16

Cys Tyr Thr Leu Arg Ala Pro Arg Ser Pro Lys Met Val Gln Gly Ser  
1 5 10 15

Gly

<210> 17

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<400> 17

Cys Phe Thr Leu Arg Ala Pro Arg Ser Pro Lys Met Val Gln Gly Ser  
1 5 10 15

Gly

<210> 18

<211> 17

<212> PRT

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<223> chemically synthesized

<400> 18

Cys Phe Ser Ile Arg Ala Pro Arg Ser Pro Lys Met Val Gln Gly Ser  
1 5 10 15

Gly

<210> 19

<211> 17

<212> PRT

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<222> (17)..(17)

<223> chemically synthesized

<400> 19

Cys Tyr Thr Leu Arg Ala Pro Arg Ser Pro Lys Met Val Gln Gly Ser  
1 5 10 15

Ala

<210> 20

<211> 17

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<222> (17)..(17)

<223> chemically synthesized

<400> 20

Cys Tyr Thr Leu Arg Ala Pro Arg Ser Pro Lys Met Val Gln Ala Thr  
1 5 10 15

Ala

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<400> 21

Cys Phe Ser Ile Arg Ala Pro Arg Ser Pro Lys Met Val Gln Ala Thr  
1 5 10 15

Ala

<210> 22

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<223> chemically synthesized

<400> 22

Cys Phe Ser Ile Arg Ala Pro Arg Ser Pro Ala Leu Ala Ser Gly Thr  
1 5 10 15

Ala

<210> 23

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<400> 23

His Pro Leu Gly Ser Pro Gly Ser Ala Ser Asp Leu Glu Thr Ser  
1 5 10 15

<210> 24

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<400> 24

Gly Ser Pro Gly Ser Ala Ser Asp Leu Glu Thr Ser Gly Leu Gln  
1 5 10 15

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<400> 25

Gly Ser Ala Ser Asp Leu Glu Thr Ser Gly Leu Gln Glu Gln Arg  
1 5 10 15

<210> 26

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<223> chemically synthesized

<400> 26

Ser Asp Leu Glu Thr Ser Gly Leu Gln Glu Gln Arg Asn His Leu  
1 5 10 15

<210> 27

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<400> 27

Glu Thr Ser Gly Leu Gln Glu Gln Arg Asn His Leu Gln Gly Lys  
1 5 10 15

<210> 28

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<223> chemically synthesized

<400> 28

Gly Leu Gln Glu Gln Arg Asn His Leu Gln Gly Lys Leu Ser Glu  
1 5 10 15

<210> 29

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<400> 29

Glu Gln Arg Asn His Leu Gln Gly Lys Leu Ser Glu Leu Gln Val  
1 5 10 15

<210> 30

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<223> chemically synthesized

<400> 30

Asn His Leu Gln Gly Lys Leu Ser Glu Leu Gln Val Glu Gln Thr  
1 5 10 15

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<400> 31

Gln Gly Lys Leu Ser Glu Leu Gln Val Glu Gln Thr Ser Leu Glu  
1 5 10 15

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<400> 32

Leu Ser Glu Leu Gln Val Glu Gln Thr Ser Leu Glu Pro Leu Gln  
1 5 10 15

<210> 33  
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<400> 33

Leu Gln Val Glu Gln Thr Ser Leu Glu Pro Leu Gln Glu Ser Pro  
1 5 10 15

<210> 34  
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<400> 34

Glu Gln Thr Ser Leu Glu Pro Leu Gln Glu Ser Pro Arg Pro Thr  
1 5 10 15

<210> 35

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<400> 35

Ser Leu Glu Pro Leu Gln Glu Ser Pro Arg Pro Thr Gly Val Trp  
1 5 10 15

<210> 36

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<400> 36

Pro Leu Gln Glu Ser Pro Arg Pro Thr Gly Val Trp Lys Ser Arg  
1 5 10 15

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<400> 37

Glu Ser Pro Arg Pro Thr Gly Val Trp Lys Ser Arg Glu Val Ala  
 1 5 10 15

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<400> 38

Arg Pro Thr Gly Val Trp Lys Ser Arg Glu Val Ala Thr Glu Gly  
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<210> 39

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<400> 39

Gly Val Trp Lys Ser Arg Glu Val Ala Thr Glu Gly Ile Arg Gly  
 1 5 10 15

<210> 40

<211> 15

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<400> 40

Lys Ser Arg Glu Val Ala Thr Glu Gly Ile Arg Gly His Arg Lys  
 1 5 10 15

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<211> 15

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<223> chemically synthesized

<400> 41

Glu Val Ala Thr Glu Gly Ile Arg Gly His Arg Lys Met Val Leu  
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<400> 42

Thr Glu Gly Ile Arg Gly His Arg Lys Met Val Leu Tyr Thr Leu  
1 5 10 15

<210> 43

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<223> chemically synthesized

<400> 43

Ile Arg Gly His Arg Lys Met Val Leu Tyr Thr Leu Arg Ala Pro  
1 5 10 15

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<211> 15

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<400> 44

His Arg Lys Met Val Leu Tyr Thr Leu Arg Ala Pro Arg Ser Pro  
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<210> 45

<211> 15

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<223> chemically synthesized

<400> 45

Met Val Leu Tyr Thr Leu Arg Ala Pro Arg Ser Pro Lys Met Val  
1 5 10 15

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<400> 46

Tyr Thr Leu Arg Ala Pro Arg Ser Pro Lys Met Val Gln Gly Ser  
1 5 10 15

<210> 47

<211> 15

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<223> chemically synthesized

<400> 47

Arg Ala Pro Arg Ser Pro Lys Met Val Gln Gly Ser Gly Cys Phe  
15

1 5 10 15

<210> 48  
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<400> 48  
 Arg Ser Pro Lys Met Val Gln Gly Ser Gly Cys Phe Gly Arg Lys  
 1 5 10 15

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<400> 49  
 Lys Met Val Gln Gly Ser Gly Cys Phe Gly Arg Lys Met Asp Arg  
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<210> 50  
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<400> 50  
 Gln Gly Ser Gly Cys Phe Gly Arg Lys Met Asp Arg Ile Ser Ser  
 1 5 10 15

<210> 51  
 <211> 15  
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<222> (1)..(1)

<223> chemically synthesized

<400> 51

Gly Cys Phe Gly Arg Lys Met Asp Arg Ile Ser Ser Ser Ser Gly  
1 5 10 15

<210> 52

<211> 15

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<400> 52

Gly Arg Lys Met Asp Arg Ile Ser Ser Ser Ser Gly Leu Gly Cys  
1 5 10 15

<210> 53

<211> 15

<212> PRT

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<222> (1)..(1)

<223> chemically synthesized

<400> 53

Met Asp Arg Ile Ser Ser Ser Ser Gly Leu Gly Cys Lys Val Leu  
1 5 10 15

<210> 54

<211> 15

<212> PRT

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<223> chemically synthesized

<400> 54

Ile Ser Ser Ser Ser Gly Leu Gly Cys Lys Val Leu Arg Arg His  
1 5 10 15

<210> 55

<211> 15

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<222> (1)..(1)

<223> chemically synthesized

<400> 55

Ala Thr Leu Arg Ala Pro Arg Ser Pro Lys Met Val Gln Gly Ser  
1 5 10 15

<210> 56

<211> 15

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<223> chemically synthesized

<400> 56

Tyr Ala Leu Arg Ala Pro Arg Ser Pro Lys Met Val Gln Gly Ser  
1 5 10 15

<210> 57

<211> 15

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<213> Artificial Sequence

<220>

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<222> (1)..(1)

<223> chemically synthesized

<400> 57

Tyr Thr Ala Arg Ala Pro Arg Ser Pro Lys Met Val Gln Gly Ser  
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<210> 58  
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<223> chemically synthesized

<400> 58  
Tyr Thr Leu Ala Ala Pro Arg Ser Pro Lys Met Val Gln Gly Ser  
1 5 10 15

<210> 59  
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<400> 59  
Tyr Thr Leu Arg Gly Pro Arg Ser Pro Lys Met Val Gln Gly Ser  
1 5 10 15

<210> 60  
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<223> chemically synthesized

<400> 60  
Tyr Thr Leu Arg Ala Ala Arg Ser Pro Lys Met Val Gln Gly Ser  
1 5 10 15

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<400> 61

Tyr Thr Leu Arg Ala Pro Ala Ser Pro Lys Met val Gln Gly Ser  
1 5 10 15

<210> 62

<211> 15

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<400> 62

Tyr Thr Leu Arg Ala Pro Arg Ala Pro Lys Met val Gln Gly Ser  
1 5 10 15

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<223> chemically synthesized

<400> 63

Tyr Thr Leu Arg Ala Pro Arg Ser Ala Lys Met val Gln Gly Ser  
1 5 10 15

<210> 64

<211> 15

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<400> 64

Tyr Thr Leu Arg Ala Pro Arg Ser Pro Ala Met Val Gln Gly Ser  
1 5 10 15

<210> 65

<211> 15

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<400> 65

Tyr Thr Leu Arg Ala Pro Arg Ser Pro Lys Ala Val Gln Gly Ser  
1 5 10 15

<210> 66

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<223> chemically synthesized

<400> 66

Tyr Thr Leu Arg Ala Pro Arg Ser Pro Lys Met Ala Gln Gly Ser  
1 5 10 15

<210> 67

<211> 15

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<223> chemically synthesized

<400> 67

Tyr Thr Leu Arg Ala Pro Arg Ser Pro Lys Met Val Ala Gly Ser  
1 5 10 15

<210> 68

<211> 15

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<223> chemically synthesized

<400> 68

Tyr Thr Leu Arg Ala Pro Arg Ser Pro Lys Met Val Gln Ala Ser  
1 5 10 15

<210> 69

<211> 15

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<222> (1)..(1)

<223> chemically synthesized

<400> 69

Tyr Thr Leu Arg Ala Pro Arg Ser Pro Lys Met Val Gln Gly Ala  
1 5 10 15

<210> 70

<211> 15

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<220>

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<222> (1)..(1)

<223> chemically synthesized

<400> 70

Pro Leu Gly Ser Pro Gly Ser Ala Ser Asp Leu Glu Thr Ser Gly  
1 5 10 15

<210> 71

<211> 15

<212> PRT

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<223> chemically synthesized

<400> 71

Leu Gly Ser Pro Gly Ser Ala Ser Asp Leu Glu Thr Ser Gly Leu  
1 5 10 15

<210> 72

<211> 15

<212> PRT

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<222> (1)..(1)  
<223> chemically synthesized

<400> 72

Ser Pro Gly Ser Ala Ser Asp Leu Glu Thr Ser Gly Leu Gln Glu  
1 5 10 15

<210> 73

<211> 15

<212> PRT

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<222> (1)..(1)  
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<400> 73

Pro Gly Ser Ala Ser Asp Leu Glu Thr Ser Gly Leu Gln Glu Gln  
1 5 10 15

<210> 74

<211> 15

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<223> chemically synthesized

<400> 74

Ser Ala Ser Asp Leu Glu Thr Ser Gly Leu Gln Glu Gln Arg Asn  
1 5 10 15

<210> 75

<211> 15

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<223> chemically synthesized

<400> 75

Ala Ser Asp Leu Glu Thr Ser Gly Leu Gln Glu Gln Arg Asn His  
1 5 10 15

<210> 76

<211> 15

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<400> 76

Ser Asp Leu Glu Thr Ser Gly Leu Gln Glu Gln Arg Asn His Leu  
1 5 10 15

<210> 77

<211> 15

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<400> 77

Asp Leu Glu Thr Ser Gly Leu Gln Glu Gln Arg Asn His Leu Gln  
1 5 10 15

<210> 78



<211> 15

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<223> chemically synthesized

<400> 78

Leu Glu Thr Ser Gly Leu Gln Glu Gln Arg Asn His Leu Gln Gly  
1 5 10 15

<210> 79

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<400> 79

Leu Gln Glu Gln Arg Asn His Leu Gln Gly Lys Leu Ser Glu Leu  
1 5 10 15

<210> 80

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<400> 80

Gln Glu Gln Arg Asn His Leu Gln Gly Lys Leu Ser Glu Leu Gln  
1 5 10 15

<210> 81

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<400> 81

Gln Arg Asn His Leu Gln Gly Lys Leu Ser Glu Leu Gln Val Glu  
 1 5 10 15

<210> 82

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<400> 82

Arg Asn His Leu Gln Gly Lys Leu Ser Glu Leu Gln Val Glu Gln  
 1 5 10 15

<210> 83

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<400> 83

His Leu Gln Gly Lys Leu Ser Glu Leu Gln Val Glu Gln Thr Ser  
 1 5 10 15

<210> 84

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<400> 84

Leu Gln Gly Lys Leu Ser Glu Leu Gln Val Glu Gln Thr Ser Leu  
1 5 10 15

<210> 85

<211> 15

<212> PRT

<213> Artificial Sequence

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<222> (1)..(1)

<223> chemically synthesized

<400> 85

Gln Gly Lys Leu Ser Glu Leu Gln Val Glu Gln Thr Ser Leu Glu  
1 5 10 15

<210> 86

<211> 15

<212> PRT

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<222> (1)..(1)

<223> chemically synthesized

<400> 86

Gly Lys Leu Ser Glu Leu Gln Val Glu Gln Thr Ser Leu Glu Pro  
1 5 10 15

<210> 87

<211> 15

<212> PRT

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<222> (1)..(1)

<223> chemically synthesized

<400> 87

Lys Leu Ser Glu Leu Gln Val Glu Gln Thr Ser Leu Glu Pro Leu  
1 5 10 15

<210> 88

<211> 15  
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 <400> 88  
 Leu Glu Pro Leu Gln Glu Ser Pro Arg Pro Thr Gly Val Trp Lys  
 1 5 10 15  
  
 <210> 89  
 <211> 15  
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 <400> 89  
 Glu Pro Leu Gln Glu Ser Pro Arg Pro Thr Gly Val Trp Lys Ser  
 1 5 10 15  
  
 <210> 90  
 <211> 15  
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 <400> 90  
 Pro Leu Gln Glu Ser Pro Arg Pro Thr Gly Val Trp Lys Ser Arg  
 1 5 10 15  
  
 <210> 91  
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<223> chemically synthesized

<400> 91

Leu Gln Glu Ser Pro Arg Pro Thr Gly Val Trp Lys Ser Arg Glu  
1 5 10 15

<210> 92

<211> 15

<212> PRT

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<223> chemically synthesized

<400> 92

Gln Glu Ser Pro Arg Pro Thr Gly Val Trp Lys Ser Arg Glu Val  
1 5 10 15

<210> 93

<211> 15

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<223> chemically synthesized

<400> 93

Glu Ser Pro Arg Pro Thr Gly Val Trp Lys Ser Arg Glu Val Ala  
1 5 10 15

<210> 94

<211> 15

<212> PRT

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<223> chemically synthesized

<400> 94

Ser Pro Arg Pro Thr Gly Val Trp Lys Ser Arg Glu Val Ala Thr  
 1 5 10 15

<210> 95

<211> 15

<212> PRT

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<222> (1)..(1)

<223> chemically synthesized

<400> 95

Pro Arg Pro Thr Gly Val Trp Lys Ser Arg Glu Val Ala Thr Glu  
 1 5 10 15

<210> 96

<211> 15

<212> PRT

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<222> (1)..(1)

<223> chemically synthesized

<400> 96

Pro Thr Gly Val Trp Lys Ser Arg Glu Val Ala Thr Glu Gly Ile  
 1 5 10 15

<210> 97

<211> 15

<212> PRT

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<222> (1)..(1)

<223> chemically synthesized

<400> 97

Thr Gly Val Trp Lys Ser Arg Glu Val Ala Thr Glu Gly Ile Arg  
 1 5 10 15

<210> 98

<211> 15

<212> PRT

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<222> (1)..(1)

<223> chemically synthesized

<400> 98

Ile Arg Gly His Arg Lys Met Val Leu Tyr Thr Leu Arg Ala Pro  
1 5 10 15

<210> 99

<211> 15

<212> PRT

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<222> (1)..(1)

<223> chemically synthesized

<400> 99

Arg Gly His Arg Lys Met Val Leu Tyr Thr Leu Arg Ala Pro Arg  
1 5 10 15

<210> 100

<211> 15

<212> PRT

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<222> (1)..(1)

<223> chemically synthesized

<400> 100

Gly His Arg Lys Met Val Leu Tyr Thr Leu Arg Ala Pro Arg Ser  
1 5 10 15

<210> 101

<211> 15

<212> PRT

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<222> (1)..(1)  
<223> chemically synthesized

<400> 101

Arg Lys Met Val Leu Tyr Thr Leu Arg Ala Pro Arg Ser Pro Lys  
1 5 10 15

<210> 102

<211> 15

<212> PRT

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<223> chemically synthesized

<400> 102

Lys Met Val Leu Tyr Thr Leu Arg Ala Pro Arg Ser Pro Lys Met  
1 5 10 15

<210> 103

<211> 15

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<222> (1)..(1)  
<223> chemically synthesized

<400> 103

Val Leu Tyr Thr Leu Arg Ala Pro Arg Ser Pro Lys Met Val Gln  
1 5 10 15

<210> 104

<211> 35

<212> PRT

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<223> chemically synthesized

<400> 104

Ser Pro Lys Met Val Gln Gly Ser Gly Cys Phe Gly Arg Lys Met Asp  
1 5 10 15



Arg Ile Ser Ser Ser Ser Gly Leu Gly Cys Lys Val Leu Arg Arg His  
20 25 30

Lys Lys Lys  
35

<210> 105

<211> 10

<212> PRT

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<223> peptide

<400> 105

Ser Pro Lys Met Val Gln Gly Ser Gly Cys  
1 5 10

<210> 106

<211> 12

<212> PRT

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<220>

<221> misc\_feature

<223> peptide

<400> 106

Arg Lys Met Val Leu Tyr Thr Leu Arg Ala Pro Arg  
1 5 10

<210> 107

<211> 13

<212> PRT

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<220>

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<223> peptide

<400> 107

His Arg Lys Met Val Leu Tyr Thr Leu Arg Ala Pro Arg  
1 5 10

<210> 108

<211> 15

<212> PRT

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<220>

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<223> peptide

<400> 108

Tyr Thr Leu Arg Ala Pro Arg Ser Pro Lys Met Val Gln Gly Ser  
1 5 10 15

<210> 109

<211> 16

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<223> peptide

<400> 109

Cys Tyr Thr Leu Arg Ala Pro Arg Ser Pro Lys Met Val Gln Gly Ser  
1 5 10 15

<210> 110

<211> 11

<212> PRT

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<223> peptide

<400> 110

Cys Tyr Thr Leu Arg Ala Pro Arg Ser Pro Lys  
1 5 10

<210> 111

<211> 13

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<223> peptide

<400> 111

Cys Tyr Thr Leu Arg Ala Pro Arg Ser Pro Lys Met Val  
1 5 10

<210> 112

<211> 14

<212> PRT

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<220>

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<223> peptide

<400> 112

Cys Tyr Thr Leu Arg Ala Pro Arg Ser Pro Lys Met Val Gln  
1 5 10

<210> 113

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<221> misc\_feature

<223> peptide

<400> 113

Cys Tyr Thr Leu Arg Ala Pro Arg Ser Pro Lys Met Val Gln Gly  
1 5 10 15

<210> 114

<211> 13

<212> PRT

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<221> MOD\_RES

<222> (1)..(1)

<223> chemically synthesized

<400> 114

Cys Thr Leu Arg Ala Pro Arg Ser Pro Lys Met Val Gln  
1 5 10

<210> 115

<211> 14

<212> PRT

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<223> peptide

<400> 115

Cys Thr Leu Arg Ala Pro Arg Ser Pro Lys Met Val Gln Gly  
1 5 10

<210> 116

<211> 15

<212> PRT

<213> Artificial Sequence

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<221> misc\_feature

<223> peptide

<400> 116

Cys Thr Leu Arg Ala Pro Arg Ser Pro Lys Met Val Gln Gly Ser  
1 5 10 15

<210> 117

<211> 16

<212> PRT

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<223> peptide

<400> 117

Cys Thr Leu Arg Ala Pro Arg Ser Pro Lys Met Val Gln Gly Ser Gly  
1 5 10 15

<210> 118

<211> 11

<212> PRT

<213> Artificial Sequence

<220>

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<223> peptide

<400> 118

Cys Leu Arg Ala Pro Arg Ser Pro Lys Met Val  
1 5 10

<210> 119

<211> 12

<212> PRT

<213> Artificial Sequence

<220>

<221> misc\_feature

<223> peptide

<400> 119

Cys Leu Arg Ala Pro Arg Ser Pro Lys Met Val Gln  
1 5 10

<210> 120

<211> 12

<212> PRT

<213> Artificial Sequence

<220>

<221> misc\_feature

<223> peptide

<400> 120

Leu Arg Ala Pro Arg Ser Pro Lys Met Val Gln Cys  
1 5 10

<210> 121

<211> 14

<212> PRT

<213> Artificial Sequence

<220>

<221> misc\_feature

<223> peptide

<400> 121

Cys Leu Arg Ala Pro Arg Ser Pro Lys Met Val Gln Gly Ser  
1 5 10

<210> 122

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

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<223> peptide

<400> 122

Cys Leu Arg Ala Pro Arg Ser Pro Lys Met Val Gln Gly Ser Gly  
1 5 10 15

<210> 123

<211> 11

<212> PRT

<213> Artificial Sequence

<220>

<221> misc\_feature

<223> peptide

<400> 123

Leu Gln Glu Gln Arg Asn His Leu Gln Gly Lys  
1 5 10

<210> 124

<211> 12

<212> PRT

<213> Artificial Sequence

<220>

<221> misc\_feature

<223> peptide

<400> 124

Leu Glu Pro Leu Gln Glu Ser Pro Arg Pro Thr Gly  
1 5 10

